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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,992	12/02/2003	Kenichi Kuba	1300-000009	5211
27572 7:	590 08/17/2005		EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			DICHT, RACHEL S	
P.O. BOX 828	O HILLS, MI 48303		ART UNIT PAPER NUMBER	
DECOMI IEEE	7 THEES, 1411 10303		2853	
			DATE MAILED: 08/17/200	5

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	<del>- \$.,</del>
	10/725,992	KUBA ET AL.	
Office Action Summary	Examiner	Art Unit	
	Rachel Dicht	2853	
The MAILING DATE of this communication Period for Reply	appears on the cover sheet	vith the correspondence address	
A SHORTENED STATUTORY PERIOD FOR RE THE MAILING DATE OF THIS COMMUNICATIO  - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a  - If NO period for reply is specified above, the maximum statutory per - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b).	N. R 1.136(a). In no event, however, may reply within the statutory minimum of the right will apply and will expire SIX (6) MG atute, cause the application to become	a reply be timely filed  irty (30) days will be considered timely.  DNTHS from the mailing date of this communication.  ABANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 2	1 July 2005		
	his action is non-final.		
3) Since this application is in condition for allocalosed in accordance with the practice unde	wance except for formal ma	• •	
Disposition of Claims	<b>,</b>	. ,	
4) ⊠ Claim(s) <u>1-16</u> is/are pending in the applicate 4a) Of the above claim(s) <u>10-16</u> is/are withd 5) ☐ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1-9</u> is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.		
Application Papers	•		
9) ☐ The specification is objected to by the Exam  10) ☑ The drawing(s) filed on 02 December 2003 is  Applicant may not request that any objection to the Replacement drawing sheet(s) including the contact of the con	is/are: a) $\square$ accepted or b) $[$ the drawing(s) be held in abeyonection is required if the drawing	ance. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the p application from the International Bur * See the attached detailed Office action for a	ents have been received. ents have been received in priority documents have been eau (PCT Rule 17.2(a)).	Application No n received in this National Stage	
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date 10/26/2004.	Paper No	Summary (PTO-413) s)/Mail Date Informal Patent Application (PTO-152)	

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### **DETAILED ACTION**

#### Election/Restrictions

1. Applicant's election with traverse of a printing unit comprising a printing area-like portion with a plurality of ink supply members, a plurality of detecting systems, and a control system to control the plurality of ink supply members in the reply filed on 12 July 2005 is acknowledged. The traversal is on the ground(s) that the printing unit of claim 1 is recited as the second printing unit of the manufacturing line of claim 14. This is not found persuasive because claim 14 is dependent on a manufacturing line for manufacturing an organic EL display not including a printing unit.

The requirement is still deemed proper and is therefore made FINAL.

## Specification

2. The disclosure is objected to because of the following informalities: Arrow L not located in Fig. 2 (refer to page 6 line 24).

Appropriate correction is required.

# Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States

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4. Claims 1, 3, 7, 8, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmid (US Pat. No. 6,427,591).

In regard to:

Claim 1:

Schmid teaches a printing unit comprising: at least one printing area or printing area-like portion, a plurality of ink supply members (4, Fig. 1) for supplying inks different, in kinds, from each other to the printing area-like portion; a plurality of detecting systems, each detecting an amount of the corresponding ink accumulated on the printing area or printing area-like portion (refer to column 7 lines 1-3); and a control system for controlling the plurality of ink supply members to regulate an amount of ink supplied by each of the plurality of ink supply members so as to bring the amount of the corresponding ink accumulated into agreement with a predetermined value established for the ink detected (refer to column 6 lines 37-42).

Claim 3:

Schmid teaches a printing unit wherein the printing area or area-like portion is a part of an offset gravure printing cylinder immediately upstream a doctor blade wiping an excess in off the offset gravure printing cylinder (refer to column 1 line 13-24).

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Claim 7:

Schmid teaches a printing unit wherein each of the plurality of ink supply members (4, Fig. 1) includes an ink container (refer to column 1 lines 13-18), a pump to deliver the ink out of the container (refer to column 6 lines 16-18), and a nozzle to eject the ink to the printing area or printing area-like portion (refer to column 6 lines 14-16).

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Claim 8:

Schmid teaches the printing unit wherein each of the plurality of detecting systems includes a displacement sensor for detecting a surface portion of the accumulated ink (refer to column 7 lines 1-3).

Claim 9:

Schmid teaches the printing unit wherein the control system controls a flow rate of the ink delivered from the pump of each of the plurality of ink supply members to the nozzle so that the surface position of the ink is brought into agreement with a predetermined level (refer to column 6 lines 37-42).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmid (US Pat. No. 6,427,591) in view of Johnson (US Pat. No. 5,678,483).

The device of Schmid DIFFERS from claim 2 in that it fails to teach a printing unit wherein the printing area or printing area-like portion is a part of a gravure printing cylinder immediately upstream a doctor blade wiping an excess ink off the gravure printing cylinder.

However, Johnson teaches a printing unit wherein the printing area or printing area-like portion is a part of a gravure printing cylinder immediately upstream a doctor blade (32, Fig. 5) wiping an excess ink off the gravure printing cylinder (refer to column 6 lines 7-8).

Therefore, it would be would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Schmid to have the printing area-like portion as part of a gravure printing cylinder with a doctor blade as taught by Johnson for the purpose of surface uniformity.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmid (US Pat. No. 6,427,591) in view of Capdeboscq (US Pat. No. 6,029,573).

The device of Schmid DIFFERS from claim 4 in that it fails to teach a printing unit wherein the printing area or area-like portion is a part of an anilox roller of flexo printing immediately upstream a doctor blade wiping an excess ink off the anilox roller.

However, Capdeboscq teaches a printing unit wherein the printing area or area-like portion is a part of an anilox roller of flexo printing immediately upstream a doctor blade wiping excess ink off the anilox roller (refer to Summary of the Invention, paragraph 15 and 16).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Schmid to include a printing area as part of an anilox roller as taught by Capdeboscq for the purpose of printing large surfaces.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmid (US Pat. No. 6,427,591) in view of Kuehnle (US Pat. No. 5,343,234).

The device of Schmid DIFFERS from claim 5 in that it fails to teach a printing unit wherein the printing area or printing area-like portion is an ink roller of offset printing.

However, Kuehnle teaches a printing unit wherein the printing area or printing area-like portion is an ink roller of offset printing (refer to column 1 line 51-52).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Schmid to include an ink roller of offset printing as taught by Kuehnle for the purpose of having a less complex and quicker machine.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmid (US Pat. No. 6,427,591) in view of Dubuit (US Pat. No. 6,397,740).

The device of Schmid DIFFERS from claim 7 in that it fails to teach a printing unit wherein the printing area or printing area-like portion is a part of a screen printing plate immediately upstream a squeegee wiping an excess ink off the screen printing plate.

However, Dubuit teaches a printing unit wherein the printing area or printing area-like portion is a part of a screen printing plate immediately upstream a squeegee wiping an excess ink off the screen printing plate (refer to Detailed Description of Art, Paragraph 6).

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Dubuit for the purpose of having a high throughput.

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Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Schmid for the purpose of having a printing area is part of a screen printing plate as taught by

#### Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachel Dicht whose telephone number is 571-272-8544. The examiner can normally be reached on 7:00 am - 3:30 pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 8, 2005

MANISH S. SHAH PRIMARY EXAMINER

8/11/05

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